

Patent claims:

1. System for the optically simply detectable and unambiguously assignable identification of data carriers, valuable documents and/or packs and the like, characterized in that the data carrier, the valuable document and/or the pack is provided with a coating which, by means of its coloration or by means of the colour effect produced and/or by means of its dimension and/or situation and/or its structure, permits an unambiguous assignment of the data carrier, of the valuable document and/or of the pack to a defined property.
- 15 2. Security elements for application to and/or for at least partial embedding in data carriers, valuable documents and/or packs and the like, characterized in that the security elements are provided with a coating as security feature which, by means of its coloration or by means of the colour effect produced and/or by means of its dimension and/or situation and/or its structure, permits an unambiguous assignment of the data carrier, of the valuable document and/or of the pack to a defined property.
- 20 3. Security elements according to Claim 2, characterized in that the coating is applied by means of a PVD or CVD process.
- 25 4. Security elements according to either of Claims 2 and 3, characterized in that the coating consists of metals, their compounds or their alloys.
- 30 35 5. Security elements according to one of Claims 2 to 4, characterized in that the coating consists of Al, Cu, Fe, Ag, Au, Cr, Ni, Zn, Cd, Bi, TiO<sub>2</sub>, Cr oxides, ZnS, ITO, Bi oxide, ATO, FTO, ZnO, Al<sub>2</sub>O<sub>3</sub>, Zn

chromate, Fe oxides, CuO, Cu-Al alloys, Cu-Zn alloys, iron alloys, steel, colour pigments, azurite or malachite and the like.

5 6. Security elements according to one of Claims 2 to 5, characterized in that the security elements have further functional and/or decorative layers.

10 7. Security elements according to Claim 6, characterized in that they additionally have one or more electrically conductive layers and/or layers with magnetic properties and/or layers with structures active in diffraction and/or layers with positive or negative printing.

15 8. Security elements according to one of Claims 2 to 7, characterized in that they are provided with a protective varnish layer on one or both sides.

20 9. Security elements according to Claim 8, characterized in that the protective varnish layer is pigmented.

25 10. Security elements according to one of Claims 2 to 9, characterized in that the security elements are laminated to one or more carrier substrate(s) which has/have the possibly functional and/or decorative layers.

30 11. Security elements according to Claim 10, characterized in that the lamination adhesive is pigmented.

35 12. Security elements according to one of Claims 2 to 11, characterized in that the security elements are provided on one or both sides with a hot-melt or cold-seal adhesive or a self-adhesive coating.

13. Security elements according to Claim 12, characterized in that the adhesive or the self-adhesive coating is pigmented.
- 5    14. Thin sheet material, characterized in that it is provided with a coating which, by means of its coloration or by means of the colour effect produced and/or by means of its dimension and/or situation and/or its structure, permits an  
10        unambiguous assignment to a defined property.
- 15        15. Thin sheet material according to Claim 14, characterized in that the coating is applied by means of a PVD or CVD process.
- 15        16. Thin sheet material according to either of Claims and 14 and 15, characterized in that the coating consists of metals, their compounds or their alloys.
- 20        17. Thin sheet material according to Claim 16, characterized in that the coating consists of Al, Cu, Fe, Ag, Au, Cr, Ni, Zn, Cd, Bi, TiO<sub>2</sub>, Cr oxides, ZnS, ITO, Bi oxide, ATO, FTO, ZnO, Al<sub>2</sub>O<sub>3</sub>, Zn chromate, Fe oxides, CuO, Cu-Al alloys, Cu-Zn alloys, iron alloys, steel, colour pigments, azurite or malachite and the like.
- 30        18. Thin sheet material according to one of Claims of 14 to 17, characterized in that the thin sheet material has further functional and/or decorative layers.
- 35        19. Thin sheet material according to Claims 18, characterized in that the thin sheet material additionally has one or more electrically conductive layers and/or layers with magnetic properties and/or layers with structures active in

diffraction and/or layers with positive or negative printing.

20. Thin sheet material according to one of Claims 14  
5 to 19, characterized in that the thin sheet material is provided with a protective varnish layer on one or both sides.
21. Thin sheet material according to Claims 20,  
10 characterized in that the protective varnish layer is pigmented.
22. Thin sheet material according to one of Claims 14 -  
15 21, characterized in that the thin sheet material is laminated to one or more carrier substrate(s), which possibly has/have functional and/or decorative layers.
23. Thin sheet material according to Claim 22,  
20 characterized in that the lamination adhesive is pigmented.
24. Thin sheet material according to one of Claims 14  
25 to 23, characterized in that the thin sheet material is provided on one or both sides with a hot-melt or cold-seal adhesive or a self-adhesive coating.
25. Thin sheet material according to Claim 24,  
30 characterized in that the adhesive or the self-adhesive coating is pigmented.
26. Valuable documents, packs and the like which have a security element according to one of Claims 2 to 13  
35 and/or a system according to Claim 1.
27. Use of the security elements according to one of Claims 2 to 13, if appropriate following tailoring,

as security features in data carriers, in particular valuable documents such as identity papers, cards, banknotes or labels, seals on or as packaging material, for example in the pharmaceutical, electronic and/or foodstuffs industry, for example in the form of blister films, folding boxes, covers, film packs.

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- 10 28. Use of the thin sheet material according to one of Claims 14 to 25, if appropriate following tailoring, as security features in data carriers, in particular valuable documents such as identity papers, cards, banknotes or labels, seals on or as packaging material, for example in the pharmaceutical, electronic and/or foodstuffs industry, for example in the form of blister films, folding boxes, covers, film packs.
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- 20 29. Use of the system according to Claim 1 for colour identification of the value or other properties of a valuable document, of a product and/or of a pack.

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